

**PROPOSED ADDITION OF THE GENERIC NAMES
"PORTUNUS" WEBER, 1795, AND "MACROPIPUS" PREST-
ANDREA, 1833 (CLASS CRUSTACEA, ORDER DECAPODA)
TO THE "OFFICIAL LIST OF GENERIC NAMES IN
ZOOLOGY"**

By L. B. HOLTHUIS

(Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

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The problem concerning the generic name *Portunus* Weber, 1795, one of the most annoying questions in the nomenclature of the Decapoda Brachyura, is similar in many respects to the problems offered by the names of the Crustacean genera *Alpheus* Fabricius, *Crangon* Fabricius, and *Carcinus* Leach (see 1951, *Bull. zool. Nomencl.* **2** : 69, 99). In the present case too, a commonly used-generic name was discovered around 1900 to be incorrectly employed for the genus to which it was currently applied. As in the above-mentioned cases, it was Miss Mary J. Rathbun who made this discovery and who accordingly changed the name of the genus in question by using the name that she thought to be nomenclatorially correct. As at the time when Miss Rathbun published her discoveries, no official suspension of the International Rules was possible, her action was the only proper way to deal with this problem. Practically all American carcinologists subsequently adopted Miss Rathbun's solution, while most European authors resented her action and did not accept the proposed changes. This difference in attitude between the American and European authors towards the present problem continues to this day, and the confusion caused thereby in carcinological literature has attained a stage that is intolerable and that should be ended at all costs. This is the reason why the present proposal is submitted to the International Commission for consideration and decision.

2. The original references to the generic names dealt with in the present proposal are the following :

Portunus Weber, 1795, *Nomencl. entomol.* : 93 (type species, by selection by Rathbun, 1926 (*Bull. U. S. nat. Mus.* **138** : 75) : *Cancer pelagicus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 626). Gender : masculine.

Portunus Fabricius, 1798, *Suppl. Ent. syst.* : 325, 363 (type species, by selection by Latreille, 1810 (*Consid. gén. Crust. Arachn. Ins.* **422**) : *Cancer pelagicus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 626). Gender : masculine.

Lupa Leach, 1814, Brewster's *Edinb. Encycl.* **7** : 390 (type species, by monotypy : *Cancer pelagicus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 626). Gender : feminine.

Macropipus Prestandrea, 1833, *Effem. sci. lett. Sicilia* **6** : 5 (type species, by monotypy : *Portunus macropipus* Prestandrea, 1833, *Effem. sci. lett. Sicilia* **6** : 4 (= *Portunus tuberculatus* P. Roux, 1828, *Crust. Médit.* : pl. 32 figs. 1-5). Gender : masculine.

Neptunus De Haan, 1838, Siebold's *Fauna japon.*, Crust. (1) : 3, 7 (type species, by selection by Miers, 1886 (*Rep. Voy. Challenger*, Zool. **17** : 172) : *Cancer pelagicus* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 626). Gender : masculine.

Liocarcinus Stimpson, 1870, *Bull. Mus. comp. Zool.* **2** : 146 (type species, by monotypy : *Portunus holsatus* Fabricius, 1798, *Suppl. Ent. syst.* : 366). Gender : masculine.

3. Before starting the discussion of the question to which genus the generic name *Portunus* should be applied, it seems desirable to ascertain whether Weber, 1795, or Fabricius, 1798, should be cited as its author. Generally, the generic name is given as *Portunus* Fabricius, 1798, and under the unrevised *Règles* this practice was entirely correct. The generic name *Portunus* Weber, 1795, under the unrevised *Règles* was invalid, since Weber in his 1795 publication under the name *Portunus* only mentioned the trivial names of a number of species, without giving a definition or a description of the genus and without designating or indicating a type species. During the Thirteenth International Congress of Zoology held in Paris in 1948, however, it was decided that a generic name published before 1st January, 1931, should be available as from the date of its original publication not only when it was then accompanied by a definition or description or when a type species was designated or indicated, but also when the name, on being first published, was accompanied by no verbal definition or description, the only indication given being that provided by the citation under the generic name concerned of the names of one or more previously published nominal species (1950, *Bull. zool. Nomencl.* 4: 80). On account of this decision *Portunus* Weber, 1795, became a valid generic name, while the name *Portunus* Fabricius, 1798, became invalid, being a junior homonym of Weber's *Portunus*. Since both *Portunus* Weber and *Portunus* Fabricius have the same type species, they are not only homonyms, but also objective synonyms of one another. For the present purposes, it is relatively immaterial which of these two names should be accepted in preference to the other.

4. The crucial point of the question dealt with in the present proposal is the fact that most American authors adopt a different species as the type species of the genus *Portunus* from that accepted by most European authors. For convenience's sake these two viewpoints, the American and the European respectively, are tabulated below, the two genera in question being indicated as "A" and "B".

	American viewpoint	European viewpoint
Genus "A" ..	<i>Portunus</i> Weber, 1795 type species: <i>Cancer pelagicus</i> Linnaeus, 1758	<i>Neptunus</i> De Haan, 1833 type species: <i>Cancer pelagicus</i> Linnaeus, 1758
Genus "B" ..	<i>Liocarcinus</i> Stimpson, 1870 type species: <i>Portunus holsatus</i> Fabricius, 1798	<i>Portunus</i> Fabricius, 1798 type species: <i>Cancer puber</i> Linnaeus, 1758

5. Both under the revised and under the unrevised *Règles* the European view point is definitely incorrect. The only species ever selected as the type species of the genus *Portunus* Weber, is *Cancer pelagicus* Linnaeus. For *Portunus* Fabricius more than one species has been cited as the type species, but here too the first validly selected type species is *Cancer pelagicus* Linnaeus, which was so selected by Latreille (1810). As far as I can ascertain, the first type selection for *Portunus* Fabricius in the sense adopted by European authors

is that by H. Milne Edwards, 1837 (Cuvier's *Règne anim.* (Ed. 4) (Disciple's Ed.) **18**: pl. 10, fig. 2), who cited *Cancer puber* Linnaeus, 1758 as type species of *Portunus* Fabricius. Several European authors have tried to prove that Latreille's (1810) type selections are invalid, but this question has now been definitely settled by the International Commission on Zoological Nomenclature, who in its *Opinion* 11 (1910, Smithson. Publ. **1938**: 17-18, and 1945, *Opin. Decl. Int. Comm. Zool. Nomencl.* **1**: 179-190) and in the amplification of that *Opinion*, published as *Opinion* 136 in 1939 (*ibid.* **2**: 13-20) expressly stated that Latreille's (1810) type selections should be accepted. The European viewpoint thus is definitely contrary to the *Règles* and it can be accepted only under suspension of the *Règles*.

6. The next question is whether or not a suspension of the *Règles* is justified in the present case, or in other words whether or not the strict application of the *Règles* will cause such serious great confusion that it should be prevented by a suspension of those *Règles*. This question is here first considered for the genera A and B (see above table) separately.

7. Genus "A." This genus consists of a considerable number of species of, often large, swimming crabs, which inhabit the tropical and sub-tropical seas of the world and in various regions serve for food (East Africa, India, Indonesia, Australia, Japan, Hawaii). In American literature at present the name *Portunus* has been universally adopted for this genus, e.g. in M. J. Rathbun's (1930, *Bull. U.S. nat. Mus.* **152**) important monograph of the Cancroid crabs of America. In West Africa the genus is rather rare and the references in West African literature are consequently few. Rathbun (1900, *Proc. U.S. nat. Mus.* **22**: 289) in her list of the Decapoda of West Africa used the generic name *Portunus* for it, but European authors like Balss (1921, *Mechaelsen's Beitr. Kenntn. Meeresf. Westaf.* **3** (2)), who later revised the West African Decapods, employed the name *Neptunus* De Haan. The latter name has been given to the genus by the majority of the authors writing on indo-westpacific crabs; the Australian and Hawaiian authors, however, use the name *Portunus*, just as does the Siamese author Suvatti in his check list of the fauna of Thailand, and Miss Rathbun in her papers on indo-westpacific crabs. The Chinese author Shen (1932, *Zool. sin.* (A) **9** (1)) in his monograph of the crabs of North China used the generic name *Portunus* for the present genus, but in later papers he employed the name *Neptunus*. The name *Neptunus* also is generally employed for the species of this genus living in the Mediterranean. Barnard (1950, *Ann. S. Afr. Mus.* **38**: 152) in his monograph of the South African Decapoda employs the name *Lupa* Leach for the present genus.

8. Summarizing, we see that for the genus "A" the name *Portunus* has been practically universally adopted in the literature concerning American, Hawaiian and Australian crabs, while in the carcinological literature concerning the rest of the indo-westpacific region it is the name *Neptunus* that is generally employed. Also in the scanty literature concerning the European and West African species of the genus, the name *Neptunus* is usually adopted.

9. A suspension of the *Règles* which would make it possible to use the generic name *Portunus* for genus "B," as is advocated by most European authors, would result in an enormous confusion as regards the name for genus

"A." The valid name for genus "A" in that case would be *Lupa* Leach, 1814, since this name is an older objective synonym of *Neptunus* De Haan, 1833. If the *Règles* were to be suspended in the foregoing sense, the name for genus "A" would have to be changed not only in the American literature, but also in the indo-westpacific literature. A strict application of the *Règles*, however, would leave unchanged the name at present used for the present genus in American (and Australian and Hawaiian) literature. In my opinion a strict application of the *Règles* is greatly to be preferred to a suspension in the case of genus "A."

10. Genus "B." About ten species of this genus are known, all of them inhabiting European seas; the genus is known from Scandinavia to the Mediterranean and the Black Sea, and from West Africa. One of the species has been reported several times from the indo-westpacific area (Red Sea, Australia, New Zealand, Japan). The animals are rather small compared to those of genus "A" and are of very little economic importance, though some are eaten.

11. When discussing the present question Miss Rathbun (1897, *Proc. biol. Soc. Wash.* 11: 155) assumed that the correct name for genus "B" was *Liocarcinus* Stimpson, 1870, and not *Portunus* Fabricius. At that time the latter name was generally used for it, and at present it still is commonly adopted by most authors. The name *Liocarcinus* has almost exclusively been used by American authors, but since the genus does not occur in American waters, Stimpson's generic name is seldom found in the literature. Though the species of this genus are rather few in number and are of very little economic importance, while furthermore they are practically never used as laboratory animals, they are very abundant along the larger part of the European coasts and therefore are dealt with in numerous popular books and textbooks. Consequently a strict application of the *Règles* in the case of genus "B" would cause a great confusion, which may be prevented by suspension of these *Règles*.

12. It is clear that whatever decision is taken in the present question, the change of several well known names is necessary before final uniformity is attained. A suspension of the *Règles* to retain the name *Portunus* for the genus "B" would cause the change of the generally adopted name for genus "A" in American literature, while it would not prevent the change of the currently employed name for that genus in the larger part of the indo-westpacific literature. Even a double suspension of the *Règles* (one to make *Portunus* the valid name for genus "B" and one to let *Neptunus* be the valid name for genus "A") would still necessitate the change of name for genus "A" in American, Australian and Hawaiian literature.

13. As a Dutch carcinologist, I should be opposed to the name *Portunus*, which has always been employed for the common swimming crabs of the shores of my country, being changed to a name which is quite unfamiliar to me, and I am certain that most other European carcinologists would feel the same way. But when we look at the question as a whole, the reasons for retaining the name *Portunus* for genus "B" become much less evident. First, because it is not only genus "B" which is involved in this question, but also genus "A," the nomenclature of which would be more greatly upset by the

suspension of the *Règles* than by the strict application of them. Second, the number of species of genus "A" is much larger than that of genus "B" (the latter contains about 10 species in all, while of the former not less than 24 species have been reported from American waters alone). Third, the nomenclature of the American crabs has been more or less stabilized by the careful work of Miss Rathbun, and a change in it is the more undesirable, in that this nomenclature (which strictly adheres to the *Règles*) is employed in Miss Rathbun's splendid monographs of the American crabs, which are the standard works consulted by anyone interested in these animals. The nomenclature of the European crabs on the contrary, is still very unsettled, probably because of lack of interest in nomenclatorial problems by European carcinologists. Furthermore, there exists for the European crabs at the present time no monograph comparable to Miss Rathbun's works.

14. Considering all sides of the present question, I can see no sufficient reason to ask for a suspension of the *Règles*. The consistent application of the *Règles* in this case seems to be the safest way out of the muddle in which we find ourselves at the present time. I realize that there will be considerable opposition to this solution, especially from European carcinologists, but they should remember that the intolerable situation which exists at present is mainly due to us, European carcinologists, ourselves. Had the European workers immediately adopted Miss Rathbun's solution, no trouble and confusion would have existed at this moment. Had they tried to get a suspension of the *Règles* in the early times, when the American point of view had not yet become so deeply rooted, their viewpoint might have been legalized. But no action whatever was undertaken and the incorrect nomenclature was stubbornly used. Palmer, 1927 (*J. mar. biol. Ass. U. K.* (n. ser.) **14** : 881), it is true, pointed out the desirability of having the *Règles* suspended for the generic name *Portunus*, but no proposal to that end was, I am informed, ever received by the International Commission.

15. The last point which I want to discuss here is, what generic name should be given to genus "B," when the name *Portunus* is not available for it. Miss Rathbun (1897, *Proc. biol. Soc. Wash.* **11** : 155) suggested the generic name *Liocarcinus* Stimpson, 1870. This name was given by Stimpson to a certain group of crabs that at present are considered to belong in genus "B." A recent examination of a paper by Prestandrea (1833, *Effem. sci. lett. Sicilia* **6** : 3-14) showed me that this author proposed a new generic name *Macropipus* for a species of swimming crab to which in the same paper he gave the names *Portunus macropipus* and *Macropipus citrinus*. This species without any doubt is identical with *Portunus tuberculatus* P. Roux, a crab belonging in genus "B." Since Prestandrea's generic name *Macropipus* is much older than the name *Liocarcinus* Stimpson, it has priority. The name *Liocarcinus*, as pointed out above, has seldom been used for the genus concerned, and therefore its replacement by the name *Macropipus* will cause no difficulties.

16. The concrete proposal which I accordingly submit is that the International Commission should :—

- (1) place on the *Official List of Generic Names in Zoology* the undermentioned generic names :—
 - (a) the name *Portunus* Weber, 1795 (gender of generic name : masculine) (type species, by selection by Rathbun (1926) : *Cancer pelagicus* Linnaeus, 1758) ;
 - (b) the name *Macropipus* Prestandrea, 1833 (gender of generic name : masculine) (type species, by monotypy : *Portunus macropipus* Prestandrea, 1833) ;
- (2) place on the *Official Index of Rejected and Invalid Generic Names in Zoology* the undermentioned generic names :—
 - (a) the name *Portunus* Fabricius, 1798 (a junior homonym, and objective synonym, of *Portunus* Weber, 1795) ;
 - (b) the name *Lupa* Leach, 1814 (an objective junior synonym of *Portunus* Weber, 1795) ;
 - (c) the name *Neptunus* De Haan, 1833 (an objective junior synonym of *Portunus* Weber, 1795) ; -
- (3) place on the *Official List of Specific Trivial Names in Zoology* the undermentioned valid trivial names :—
 - (a) the name *pelagicus* Linnaeus, 1758 (as published in the binominal combination *Cancer pelagicus* (trivial name of type species of *Portunus* Weber, 1795) ;
 - (b) the name *tuberculatus* P. Roux, 1828 (as published in the binominal combination *Portunus tuberculatus*).

**SUPPORT FOR DR. L. B. HOLTHUIS' PROPOSALS RELATING TO THE
GENERIC NAME "PORTUNUS" WEBER, 1795 (CLASS CRUSTACEA,
ORDER DECAPODA)**

By FENNER A. CHACE, Jr.

(*Smithsonian Institution, U.S. National Museum, Washington, D.C., U.S.A.*)

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Dr. Holthuis has informed me that you would like to have my comments on his proposal to the International Commission on the use of the generic name *Portunus* Weber, 1795. I am in complete agreement with this proposal as phrased by Dr. Holthuis, and I am fairly certain that all other American crab specialists would react similarly. The decision recommended in this proposal is the one which has been accepted by all American workers in recent years as far as I am aware.